

ABSTRACT OF THE DISCLOSURE

5 A network device monitors the flooding of frames and obtains
information to update a port's forwarding table to reduce
unnecessary frame flooding. An unknown network address and a count
10 are maintained at a first port, the unknown address being an
address for which there is no information identifying another port
to which unicast frames containing the address are to be
forwarded, the count identifying the number of times frames
containing the unknown address have been flooded from the first
15 port to other ports. The count is incremented each time a unicast
frame containing the unknown address is flooded from the first
port to the other ports. When the count reaches a threshold, it
is determined whether there is information at another port that
identifies a specific port to which frames containing the unknown
address are to be forwarded, and if so then the information is
transferred to the first port, whereupon the unknown address
becomes known at the first port. Subsequently, unicast frames
received at the first port that contain the now known address are
forwarded to only the specific port rather than being flooded.

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